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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/836,976	04/18/2001	David W. Conrad	00RE098	9060

7590 11/17/2004

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EXAMINER

SICONOLFI, ROBERT

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/836,976

Applicant(s)

CONRAD ET AL.

Examiner

Robert A. Siconolfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Amendment filed on 7/6/04 has been received.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/6/04 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marshall et al (U. S. Patent no. 5,685,398) in view of McCarthy (U. S. Patent no. 4,181,201) and Hodgson (U. S. Patent no. 2,700,439).

Marshall discloses: motor 34, field cup 82, armature plate 42, stationary plate 64, friction disk 66, compression spring 50,60, lever assembly 310 (lever 312,314) with first and second pivot points 316,318

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Marshall does not disclose a cam means to actuate the lever device. McCarthy teaches a cam means in combination with a lever means to disengage a motor brake (see figures 1-3 handle 92, cam 88, lever 24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a cam means as taught by McCarthy in the brake of Marshall et al in order to provide a good mechanical advantage in a compact space. The handle of Marshall has a mechanical advantage due to its length. The longer it is the more advantage it has. The use of a cam would eliminate the need for a large handle sticking straight up.

Marshall, as modified above, does not teach having the cam assembly pushing the lever and the cam away from a fixed element. Hodgson teaches having a cam assembly pushing against a fixed element in order to release the brake (see cam 57a, handle 57, fixed element 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the cam pushing the lever and the cam away from a fixed element as taught by Hodgson in the device of Marshall, as modified, to produce a more durable product. The cam has a point contact which means that the stress is concentrated in the surface it is pushing against. It is easier to design the housing/field cup to withstand such a stress concentration. It also allows the force against the lever to be spread out along the entire supporting surface of the cam. Such a reversal of parts is also supported by *In re Gazda*, 219 F.2d 449, 104 USPQ 400 (CCPA 1955).

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Regarding claims 4,5,14 and 15, the device of Marshall does not disclose the tilting of the lever in the range of 1-10 degrees. The specific angle used to achieve separation of the armature plate and the friction disk is a design choice and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made.

Regarding claims 9,10,19,20, the cam of McCarthy does not specifically disclose the side angle. The specific angle used is a design choice and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made. To support the fact that it is merely a design choice the examiner notes that the applicant admits that any angle or no angle at all may be used in the specification (page 11 lines 25-27).

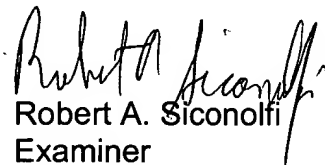
Response to Arguments

5. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A. Siconolfi whose telephone number is 703-305-0580. The examiner can normally be reached on M-F 10 am-3 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on (703) 308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Robert A. Siconolfi
Examiner
Art Unit 3683
4/13/04

RS